

APPARATUS FOR IMPLANTING DEVICES
IN ATRIAL APPENDAGES

Abstract of the Disclosure

The invention provides a delivery system for placing devices in atrial appendages. The system includes a catheterization apparatus having a tubular structure with one or more nested tubes, wires, and shafts. The tubes establish a passageway for moving a device through a body's vasculature and heart into an atrial appendage. An expandable positioning guide is disposed on the distal end of a tube passing through the apparatus. The positioning guide is expanded in situ to engage atrial wall surfaces proximate to the atrial appendage for mechanical support. The deployed positioning guide mechanically stabilizes the device delivery passageway. A shaft passing through the tubes transports the device through the passageway to the atrial appendage.

The system includes catheterization apparatus for transseptal delivery of the devices. An outer tube or sheath in the apparatus is used to penetrate and traverse the septum. An expandable securement device is disposed toward an end of the sheath. The securement device is expanded in situ to engage surface portions of the traversed septum to restrain further inadvertent movement of the septum-traversing sheath.